VOLVO
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VOLVO

WIRING DIAGRAM

RSE – REAR SEAT ENTERTAINMENT SYSTEM
V70/V70R/XC70/XC90

TP 3993202

2006 LATE VERSION

Vehicles with SRS (Airbag)/SIPS bag/ IC (Inflatable Curtain)

Warning!

Extra caution must be exercised when working on vehicles equipped with SRS/SIPS bag/IC in order to avoid:
1. Personal injuries when performing repair work.
2. Damage or malfunction of the SRS/SIPS bag/IC system.

Work involving the SRS/SIPS bag/IC systems or other components in the vehicle that may affect the SRS/SIPS bag/IC systems must always be performed by an authorized Volvo workshop.
In case of doubt, consult the SRS and SIPS bag/IC service manual.

Is the vehicle equipped with SRS/SIPS bag/IC?

Vehicles with SRS are most easily recognized by the letters SRS in the center of the steering wheel. If the vehicle also has a passenger side airbag, the letters SRS are stamped on the dashboard above the glove compartment. SRS vehicles from 1993 and onward also have explosive seat belt tensioners. SIPS bags are only installed on SRS vehicles from 1995 and onward. SIPS bag decals are located on the windshield and seat compartment. Vehicles with IC can be recognized by the letters IC on the C/D panel (4 door) or the B panel (5 door).

General recommendations

- Be especially careful when working on or around SRS, SIPS, and IC components.
- Make sure that no wires are pinched, frayed, or pierced.
- Never install accessories by the sensors.
- Where applicable, work on the steering wheel, steering shaft, or steering gear must be done in accordance with the methods in the SRS section of VIDA.
- Certain components of the aforementioned systems must be grounded while working. Read the appropriate sections in VIDA.
- Install no accessories in the areas between the A and B posts, the B and C posts, and the C and D posts.

Test terminal

Data link connector in the passenger compartment.

Changes introduced up to October 2005 inclusive
Any changes made to the vehicles after this date are not included in the manual. If necessary refer to service bulletins.

Volvo models are sold in versions adapted for different markets. These adaptations depend on factors such as legal requirements, taxation, and market demands.
This manual may therefore include illustrations and text that do not apply to the vehicles in your country.

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Replaces earlier publication 3993201 of Electronic Wiring Diagram (EWD) TP 3991002
We reserve the right to make modifications.

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Abbreviations

Groups

Group 39 = Other

Ignition switch symbols

X = Accessories (audio position)
S = Powered upon insertion of key
15 = Contact remains connected during start
15l = Contact is broken while starting
30 = Constant power from the battery
50 = Start

Countries / Markets

A = Austria
AUS = Australia
B = Belgium
CDN = Canada
CH = Switzerland
D = Germany
DK = Denmark
E = Spain
EU/OS = Markets outside USA and Canada
FIN = Finland
GB = Great Britain
ISR = Israel
J = Japan
KOR = Korea
N = Norway
NL = Netherlands
S = Sweden
USA = United States of America
WEU = Western Europe

Other

AMP = Amplifier
AUD = Audio Module (AUD)
AUX = External equipment outlet
CEM = Central Electronic Module (CEM)
DVD = DVD player/control module
MMM = Multimedia Module (MMM)
RAS = Rear Audio Separation module (RAS)
REM = Rear Electronic Module (REM)
RSE = Rear Seat Entertainment
RTI = Road Traffic Information
TFT = Display screen in head restraint

Colors

BL = Blue
BN = Brown
GN = Green
GR = Gray
LBL = Light Blue
LGN = Light Green
OR = Orange
P = Pink
R = Red
SB = Black
VO = Violet
W = White
Y = Yellow

How to use the wiring diagrams 1:2

The descriptions below apply in general to all wiring diagram manuals, although not all sections are necessarily contained in this manual.

A. Component designation

Every component has a component designation that consists of two parts.

The first part is a type number that describes the type of component in question, e.g. 3/xx.

The second part of the designation is a serial number, e.g. x/2.

Together, this constitutes a component designation, e.g. 3/2.

At the end of the manual is a list of components, where, with the help of the component designation, you can read off the name of the component, e.g., 3/2 = light switch.

List of type numbers

The list shows which type of component that respective type numbers refer to, e.g., 3/x = switch, 6/x = electric motor, etc.

1	Battery
2	Relay
3	Switch
4	Control module
5	Driver information module
6	Electric motor
7	Sensor
8	Actuator
9	Heating element
10	Light
11	Fuse
15	Electrical distribution rail/box
16	Audio
17	Service/diagnostics
18	Contact reel
19	Meter
20	Ignition component/shunt
26	Converter
27	Optics
31	Ground connection
53	Branching point
54	Connector

B. Branching points

The wiring diagrams contain numbered junction points, e.g. 53/352.

This manual contains a section with a list of branching points. This list shows all the components that are connected to each branching point.

The location of the branching points is shown in the "Cable harness routing in vehicle" section.

C. Connectors

Connectors provide a bridge between two cable harnesses and are described in the "Connectors" section.

D. Electrical distribution

Operation of the fuses and relays is shown in the "Electrical distribution" section.

E. Data communication

Today’s cars are equipped with CAN, LIN & MOST networks that transmit information. Connections to these networks are shown in their entirety on the respective wiring diagram. Complete information on Data communication can be found in the section entitled "Control modules".

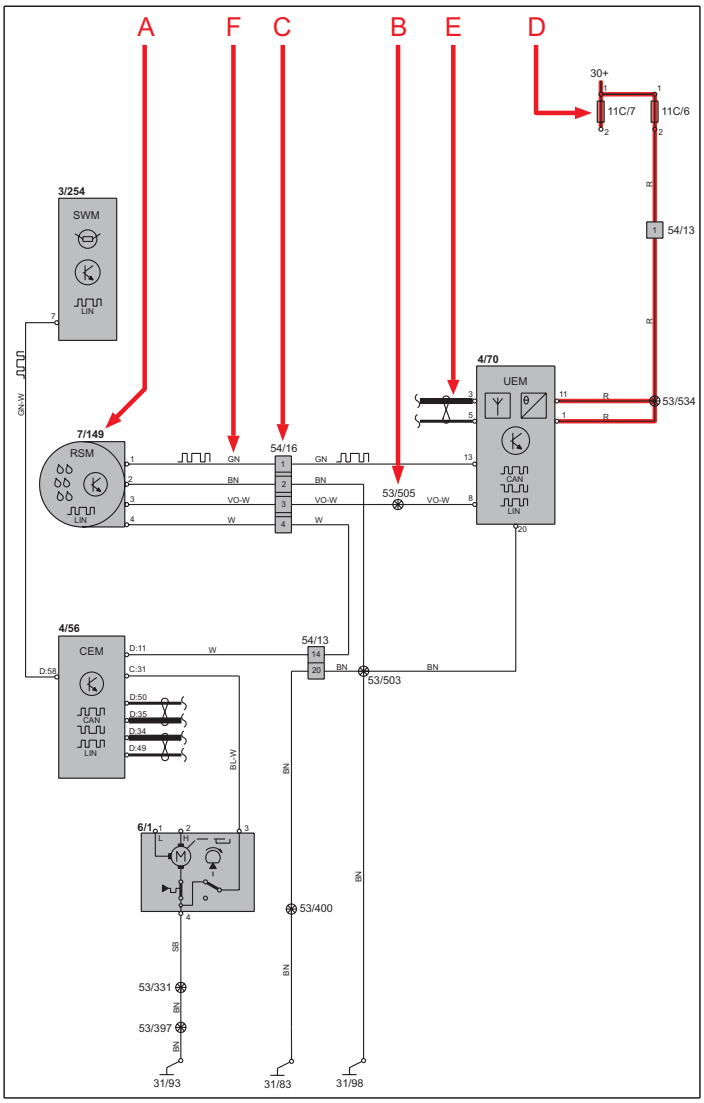
F. Abbreviations

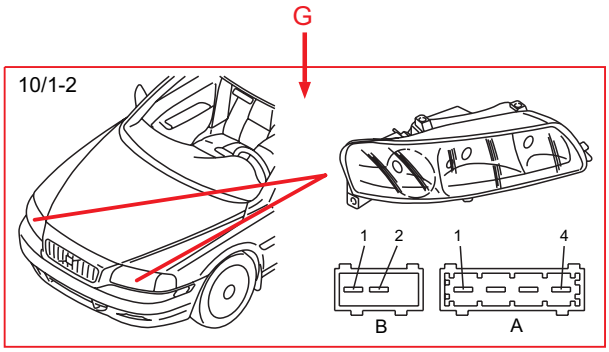
A number of different abbreviations are used in the manual. These are explained in the section "Abbreviations".

G. Component location

There is a section at the end of the manual in which the appearance and location of components is described in numerical order.

How to use the wiring diagrams 2:2





List of symbols

= System voltage

= Ground connection via wiring

= Ground connection in component/chassis

= Screened wire

= Junction point

= Twisted cable

= Electrical connection

= Variant

= CAN communication

= CAN high data signal (CAN H)

= CAN low data signal (CAN L)

= LIN communication

= LIN communication

= DIN cable, coaxial cable, etc.

= Data communication

= CAN communication

= MOST communication

= MOST communication

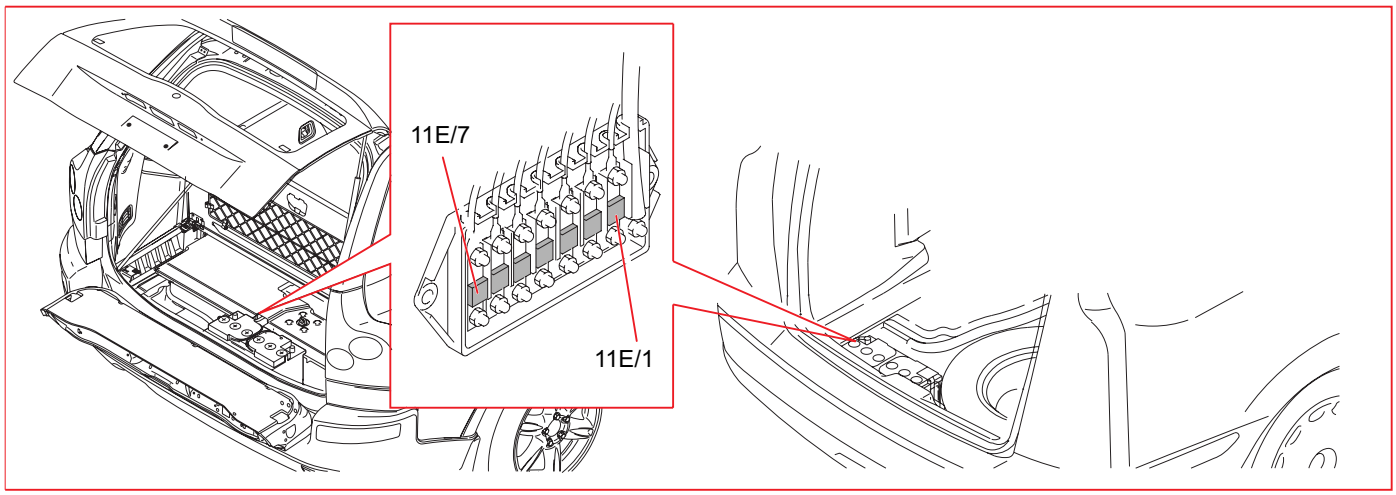
= Connection with distribution box

= Further connection to...

= Connector between cable harnesses

= Connector connected in component

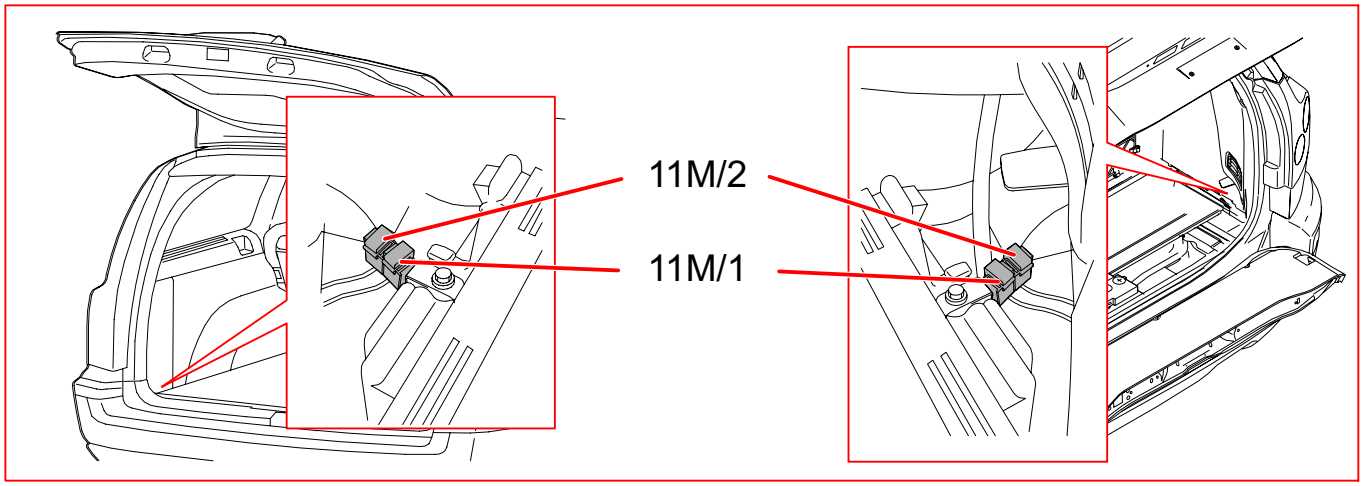
Fuses
Cargo compartment 11E



11 E Fuses at the battery

No.	Fuse function		via	A
1	4/58	Rear Electronic Module (REM) Main fuse for: F1-F38	- -	60
2	11M/1	Fuse in spare fuse holder, cargo compartment	-	40
4	4/56	Central Electronic Module (CEM) Main fuse for: F1-F2, F11, F13-F16, F26-F30, F33	- -	50

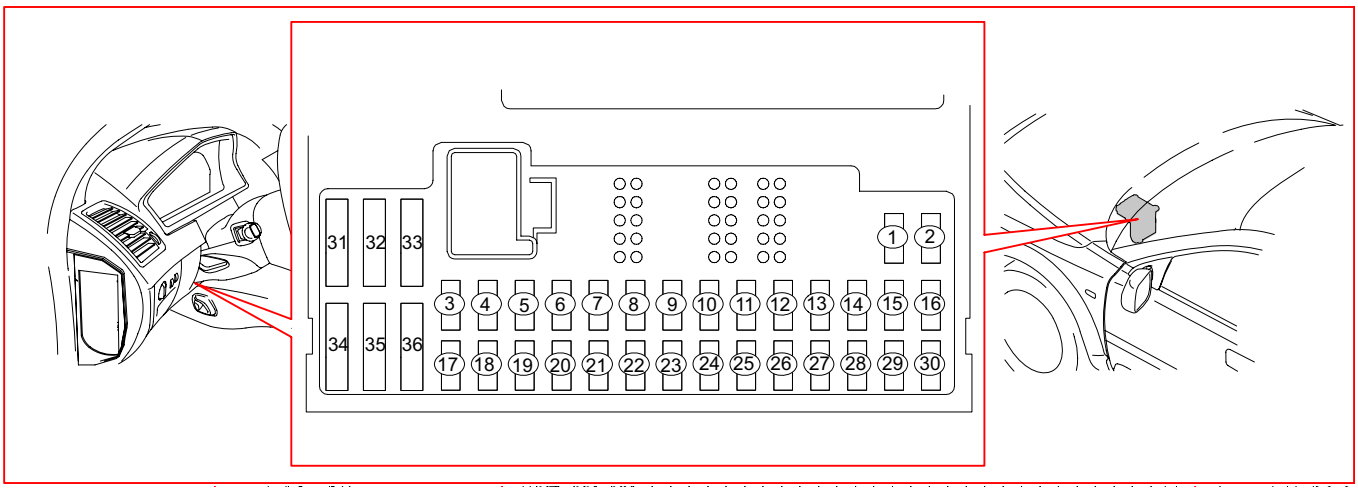
Fuses
Cargo compartment 11M



11M/1-2 Fuses in spare fuse holder, cargo compartment

No.	Fuse function	via	A
1	16/82 DVD player / control module, 30-feed 16/122 Rear Audio Separation module (RAS), 30-feed	- -	10
2	16/82 DVD player / control module, X-feed	-	5

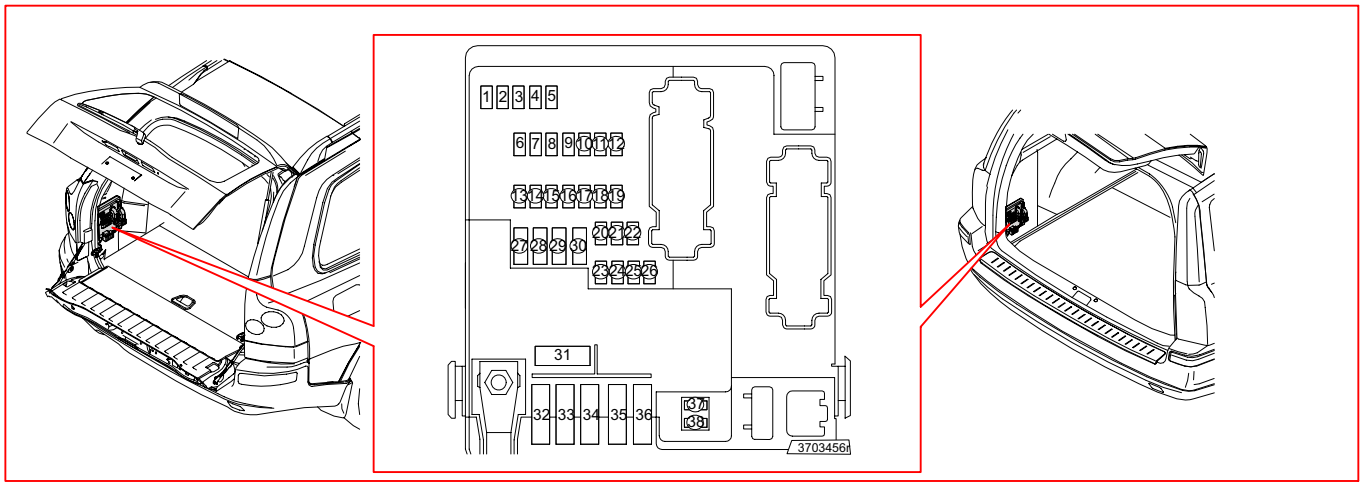
Fuses
Central Electronic Module (CEM)



4/56 Central Electronic Module (CEM)

No.	Fuse function		via	A
F11	9/1	Outlet 12V front	-	15
	9/25	Outlet 12V rear	-	
	11M/2	Fuse in spare fuse holder, cargo compartment	-	

Fuses
Rear Electronic Module (REM)



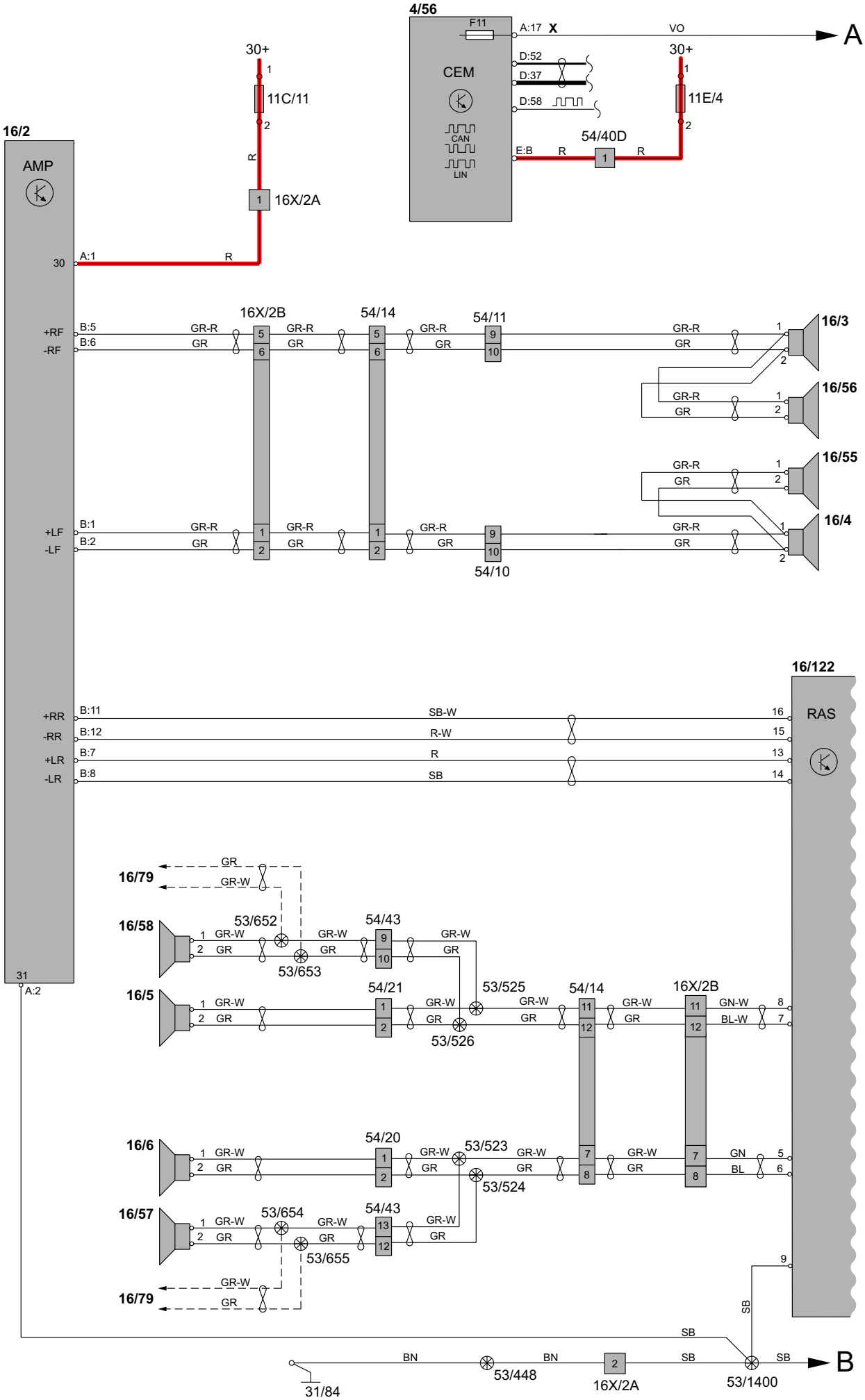
4/58 Rear Electronic Module (REM)

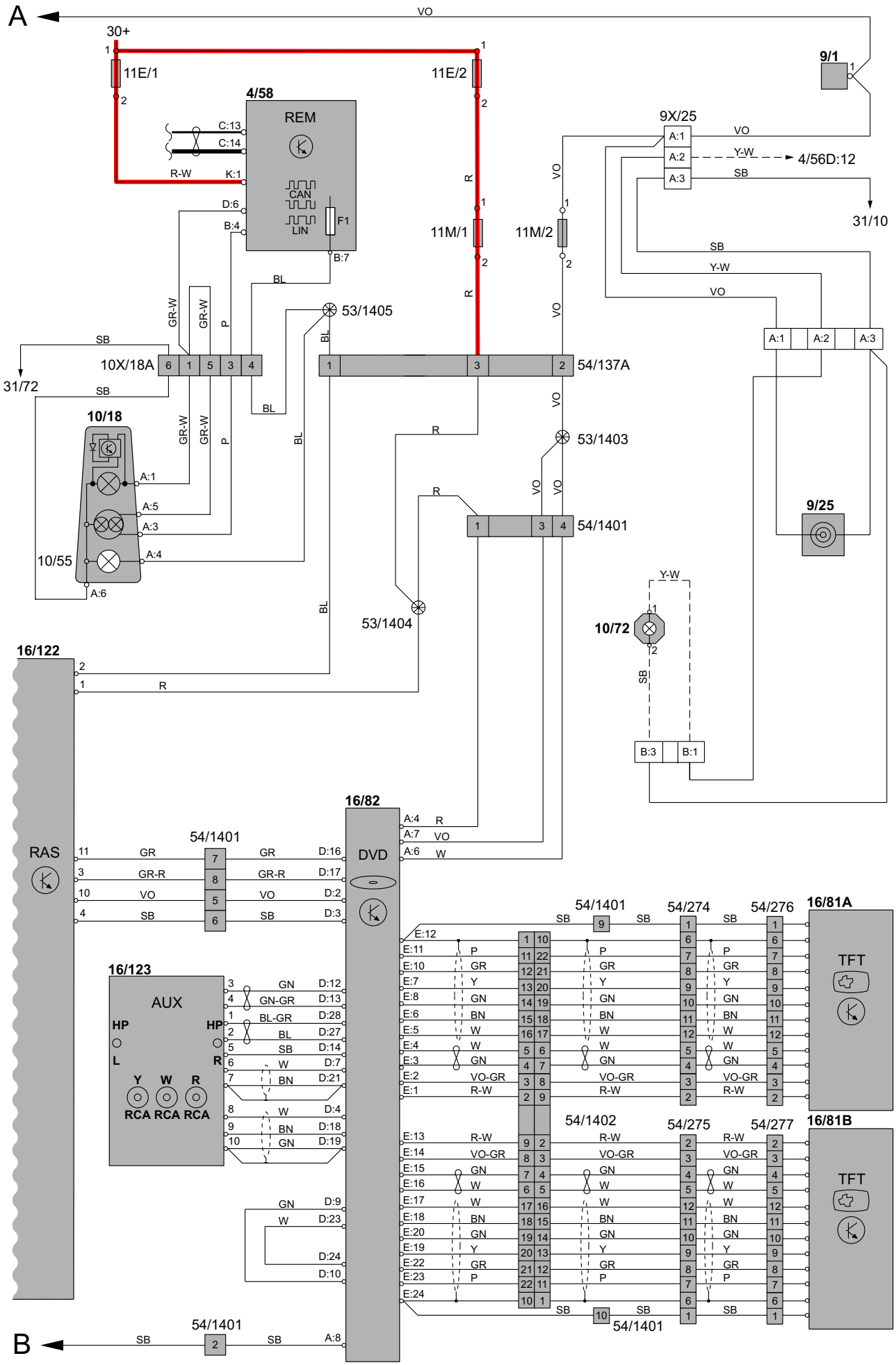
No.	Fuse function		via	A
F1	10/48	Reversing light, right	-	10
	10/55	Reversing light, left	-	
	16/122	Rear Audio Separation module (RAS), reverse gear signal	-	

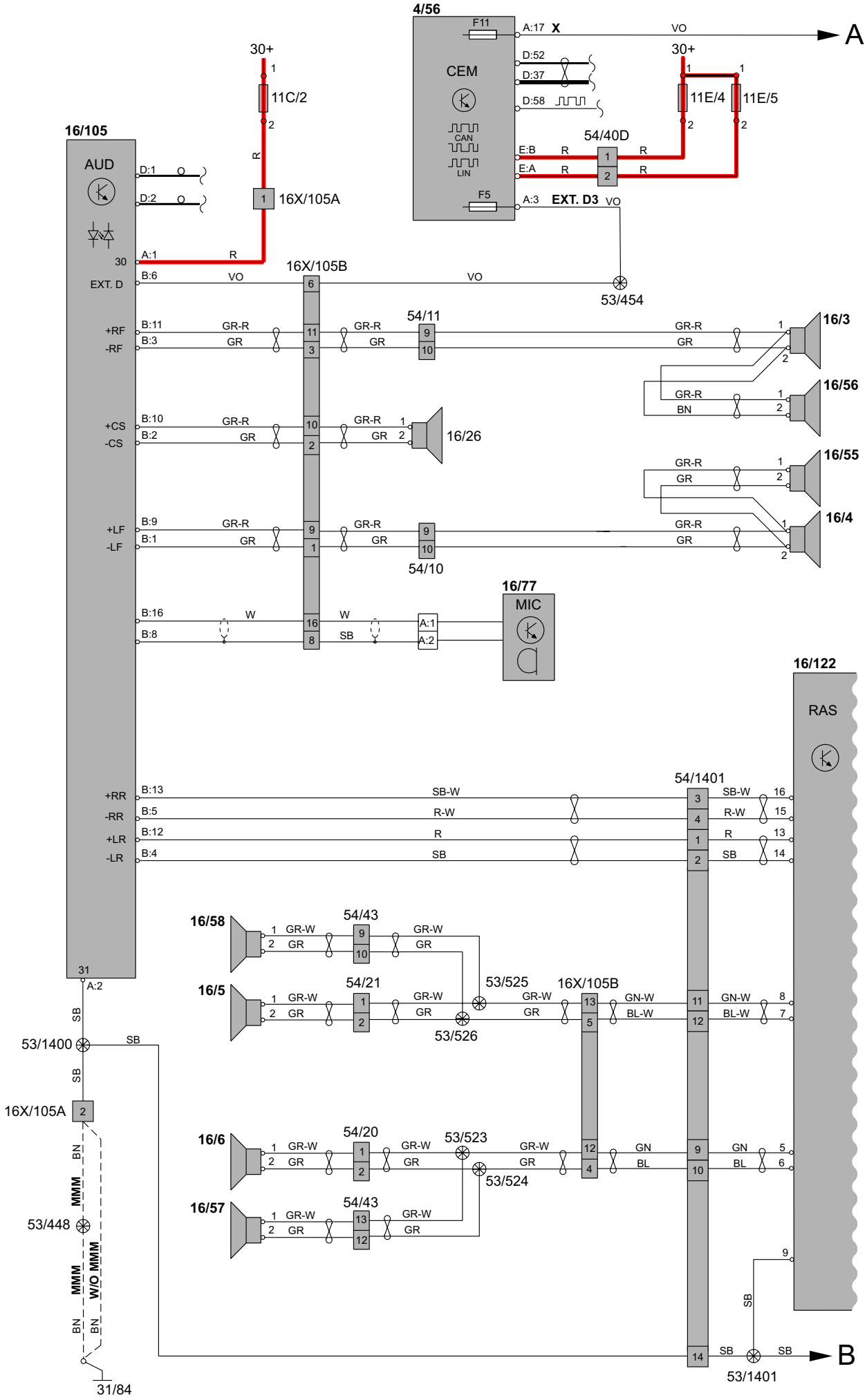
Ground connections
31/84

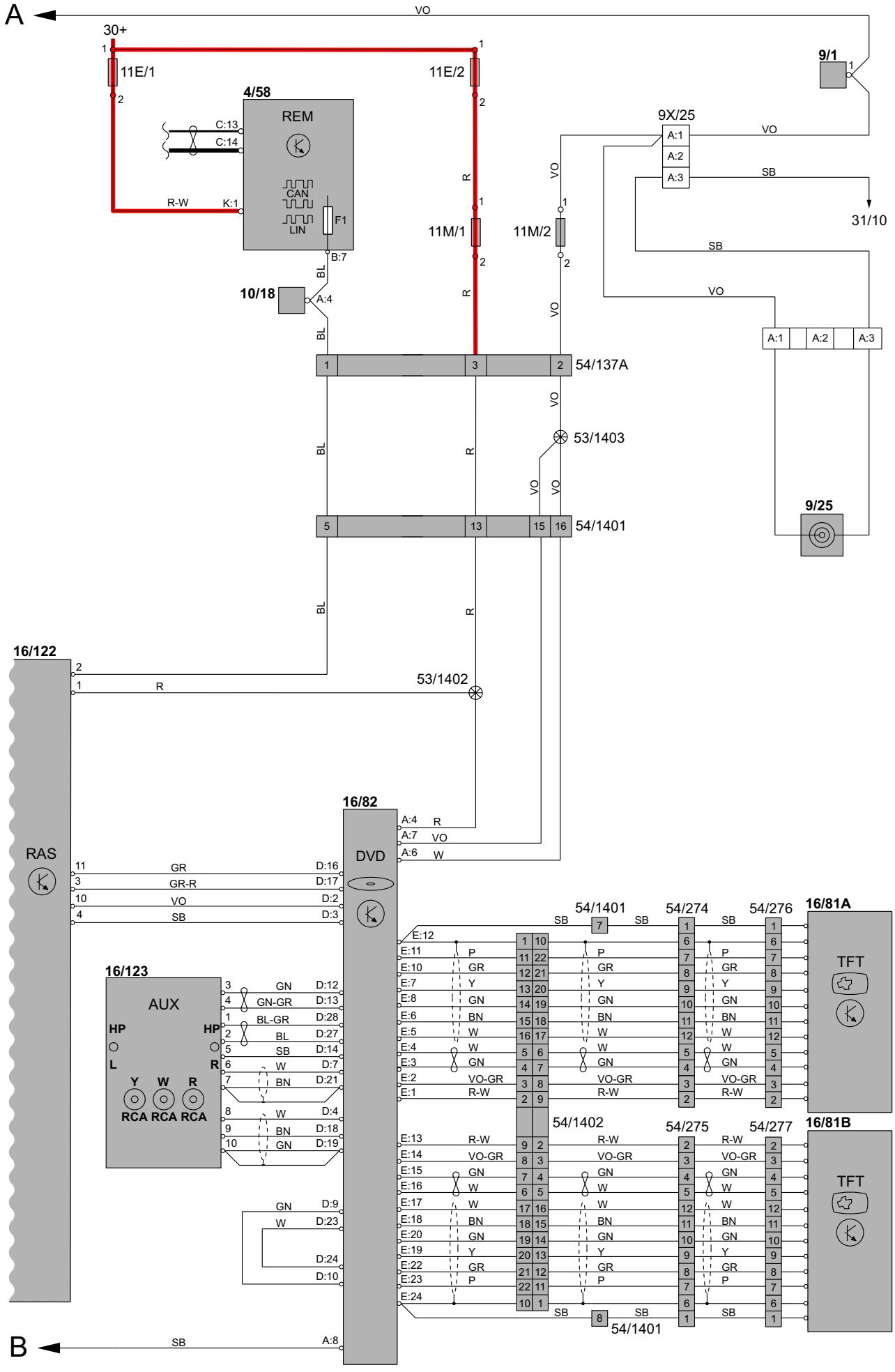
31/84	A-post, right-hand side
3/111	Light Switch Module (LSM)
3/112	Climate Control Module (CCM)
3/254	Steering Wheel Module (SWM)
4/68	Steering Wheel Angle Sensor Module (SAS)
6/48	Damper Motor Module (DMM), recirculation
6/69	Damper Motor Module (DMM), ventilation/floor/defroster
6/95	Damper Motor Module (DMM), temperature, left-hand side
6/96	Damper Motor Module (DMM), temperature, right-hand side
6/102	Damper Motor Module (DMM), defroster
6/103	Damper Motor Module (DMM), floor/ventilation
7/159	Air Quality Sensor (AQS)
16/1	Audio Module (AUM), V70
16/2	Amplifier, V70
16/46	RTI display, V70
16/46	Multimedia display, XC90
16/60	Phone Module (PHM)
16/82	DVD player/control module
16/93	Control module, cellular phone handsfree, accessory
16/94	Infotainment Control Module (ICM), XC90
16/105	Audio Module (AUD), XC90
16/106	CD Player Module (MP2), XC90
16/107	MD Player Module (MP1), XC90
16/122	Rear Audio Separation module (RAS)
17/13	Data link connector
54/112	Connector, Infotainment cable harness, XC90

Group 39 Other
Rear Seat Entertainment V70 1:2




A
VO
30+
11E/1
11E/2
9/1
4/58
REM
C:13
C:14
R-W
K:1
CAN
LIN
F1
D:6
B:4
B:7
9X/25
A:1
A:2
A:3
Y-W
4/56D:12
SB
31/10
11M/1
11M/2
R
VO
BL
GR-W
P
53/1405
10X/18A
31/72
54/137A
10/18
53/1403
53/1401
9/25
10/55
A:4
A:5
A:6
53/1404
10/72
B:3
B:1
16/122
RAS
16/82
DVD
54/1401
GR
GR-R
VO
SB
D:16
D:17
D:2
D:3
16/123
AUX
HP
L
R
Y
W
RCA RCA RCA
GN
GN-GR
BL-GR
BL
W
BN
D:12
D:13
D:28
D:27
D:14
D:7
D:21
D:4
D:18
D:19
D:9
D:23
D:24
D:10
54/274
54/276
16/81A
TFT
54/1402
54/275
54/277
16/81B
E:12
E:11
E:10
E:7
E:8
E:6
E:5
E:4
E:3
E:2
E:1
E:13
E:14
E:15
E:16
E:17
E:18
E:20
E:19
E:22
E:23
E:24
B
A:8


4/56
CEM
F11
A:17 X
VO
A
D:52
D:37
D:58
CAN
LIN
F5
A:3 EXT. D3 VO
30+
11C/2
11E/4
11E/5
54/40D
E:B R
E:A R
16/105
AUD
D:1 O
D:2 O
16X/105A
A:1 R
30
EXT. D
B:6 VO
16X/105B
53/454
+RF
-RF
B:11 GR-R
B:3 GR
54/11
16/3
+CS
-CS
B:10 GR-R
B:2 GR
16/26
16/56
BN
16/55
+LF
-LF
B:9 GR-R
B:1 GR
54/10
16/4
16/77
MIC
B:16 W
B:8 SB
16/122
RAS
+RR
-RR
+LR
-LR
B:13 SB-W
B:5 R-W
B:12 R
B:4 SB
54/1401
16/58
54/43
16/5
54/21
53/525
53/526
16/6
54/20
53/523
53/524
16/57
31
A:2
53/1400
16X/105A
53/448
MMM
W/O MMM
31/84
B
53/1401


A
VO
30+
11E/1
11E/2
9/1
4/58
REM
C:13
C:14
R-W
K:1
CAN
LIN
F1
B:7
9X/25
A:1
A:2
A:3
SB
31/10
11M/1
11M/2
10/18
A:4
BL
R
54/137A
53/1403
54/1401
9/25
16/122
53/1402
16/82
DVD
RAS
A:4
A:7
A:6
GR
GR-R
VO
SB
D:16
D:17
D:2
D:3
16/123
AUX
HP
L
R
Y
W
RCA RCA RCA
GN
GN-GR
BL-GR
BL
SB
W
BN
D:12
D:13
D:28
D:27
D:14
D:7
D:21
D:4
D:18
D:19
D:9
D:23
D:24
D:10
54/1401
54/274
54/276
16/81A
TFT
E:12
E:11
E:10
E:7
E:8
E:6
E:5
E:4
E:3
E:2
E:1
P
GR
Y
GN
BN
W
VO-GR
R-W
54/1402
54/275
54/277
16/81B
E:13
E:14
E:15
E:16
E:17
E:18
E:20
E:19
E:22
E:23
E:24
B
A:8

Connectors
54/40D - 54/137A

54/40D
2-pin black

No.	Passenger compartment harness			Cargo compartment harness		
1	4/56E:B	Central Electronic Module (CEM)	R	11E/4:2	Main fuses at battery	R
2	4/56E:A	Central Electronic Module (CEM)	R	11E/5:2	Main fuse at the battery	R

54/137A
3-pin gray, V70

No.	RSE adapter harness			RSE cabin harness		
1	53/1405	Branching point	BL	16/122:2	Rear Audio Separation module (RAS)	BL
2	11M/2:2	Fuse in spare fuse holder, cargo compartment	VO	53/1403	Branching point	VO
3	11M/1:2	Fuse in spare fuse holder, cargo compartment	R	53/1404	Branching point	R

54/137A
3-pin gray, XC90

No.	Cargo compartment harness			RSE cabin harness		
1	10/18A:4	Lamp housing, rear left	BL	54/1401:5	Connector	BL
2	11M/2:2	Fuse in spare fuse holder, cargo compartment	VO	53/1403	Branching point	VO
3	11M/1:2	Fuse in spare fuse holder, cargo compartment	R	54/1401:13	Connector	R

Connectors
54/274 - 54/275

54/274
12-pin gray

No.	RSE cabin harness			RSE left backrest harness		
1	54/1401:9 54/1401:7	Connector, V70 Connector, XC90	SB	54/276:1	Connector	SB
2	54/1402:9	Connector	R-W	54/276:2	Connector	R-W
3	54/1402:8	Connector	VO-GR	54/276:3	Connector	VO-GR
4	54/1402:7	Connector	GN	54/276:4	Connector	GN
5	54/1402:6	Connector	W	54/276:5	Connector	W
6	54/1402:10	Connector	-	54/276:6	Connector	-
7	54/1402:22	Connector	P	54/276:7	Connector	P
8	54/1402:21	Connector	GR	54/276:8	Connector	GR
9	54/1402:20	Connector	Y	54/276:9	Connector	Y
10	54/1402:19	Connector	GN	54/276:10	Connector	GN
11	54/1402:18	Connector	BN	54/276:11	Connector	BN
12	54/1402:17	Connector	W	54/276:12	Connector	W

54/275
12-pin gray

No.	RSE cabin harness			RSE right backrest harness		
1	54/1401:10 54/1401:8	Connector, V70 Connector, XC90	SB	54/277:1	Connector	SB
2	54/1402:2	Connector	R-W	54/277:2	Connector	R-W
3	54/1402:3	Connector	VO-GR	54/277:3	Connector	VO-GR
4	54/1402:4	Connector	GN	54/277:4	Connector	GN
5	54/1402:5	Connector	W	54/277:5	Connector	W
6	54/1402:1	Connector	-	54/277:6	Connector	-
7	54/1402:11	Connector	P	54/277:7	Connector	P
8	54/1402:12	Connector	GR	54/277:8	Connector	GR
9	54/1402:13	Connector	Y	54/277:9	Connector	Y
10	54/1402:14	Connector	GN	54/277:10	Connector	GN
11	54/1402:15	Connector	BN	54/277:11	Connector	BN
12	54/1402:16	Connector	W	54/277:12	Connector	W

Connectors
54/1401 V70

54/1401
10-pin gray, V70

No.	RSE cabin harness			RSE tunnel harness		
1	53/1404	Branching point	R	16/82A:4	DVD player/control module	R
2	53/1400	Branching point	SB	16/82A:8	DVD player/control module	SB
3	53/1403	Branching point	VO	16/82A:7	DVD player/control module	VO
4	53/1403	Branching point	VO	16/82A:6	DVD player/control module	W
5	16/122:10	Rear Audio Separation module (RAS)	VO	16/82D:2	DVD player/control module	VO
6	16/122:4	Rear Audio Separation module (RAS)	SB	16/82D:3	DVD player/control module	SB
7	16/122:11	Rear Audio Separation module (RAS)	GR	16/82D:16	DVD player/control module	GR
8	16/122:3	Rear Audio Separation module (RAS)	GR-R	16/82D:17	DVD player/control module	GR-R
9	54/274:1	Connector	SB	16/82E:12	DVD player/control module	SB
10	54/275:1	Connector	SB	16/82E:24	DVD player/control module	SB

Connectors
54/1401 XC90

54/1401
16-pin blue, XC90

No.	RSE cabin harness			RSE tunnel harness		
1	16/105B:12	Audio Module (AUD)	R	16/122:13	Rear Audio Separation module (RAS)	R
2	16/105B:4	Audio Module (AUD)	SB	16/122:14	Rear Audio Separation module (RAS)	SB
3	16/105B:13	Audio Module (AUD)	SB-W	16/122:16	Rear Audio Separation module (RAS)	SB-W
4	16/105B:5	Audio Module (AUD)	R-W	16/122:15	Rear Audio Separation module (RAS)	R-W
5	54/137A:1	Connector	BL	16/122:2	Rear Audio Separation module (RAS)	BL
6	-		-	-		-
7	54/274:1	Connector	SB	16/82E:12	DVD player/control module	SB
8	54/275:1	Connector	SB	16/82E:24	DVD player/control module	SB
9	16X/105B:12	Connector interface, original car	GN	16/122:5	Rear Audio Separation module (RAS)	GN
10	16X/105B:4	Connector interface, original car	BL	16/122:6	Rear Audio Separation module (RAS)	BL
11	16X/105B:13	Connector interface, original car	GN-W	16/122:8	Rear Audio Separation module (RAS)	GN-W
12	16X/105B:5	Connector interface, original car	BL-W	16/122:7	Rear Audio Separation module (RAS)	BL-W
13	54/137A:3	Connector	R	53/1402	Branching point	R
14	53/1400	Branching point	SB	53/1401	Branching point	SB
15	53/1403	Branching point	VO	16/82A:7	DVD player/control module	VO
16	53/1403	Branching point	VO	16/82A:6	DVD player/control module	W

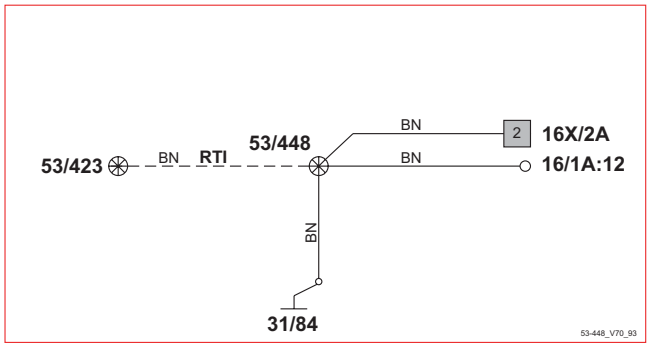
Connectors
54/1402

54/1402
22-pin green

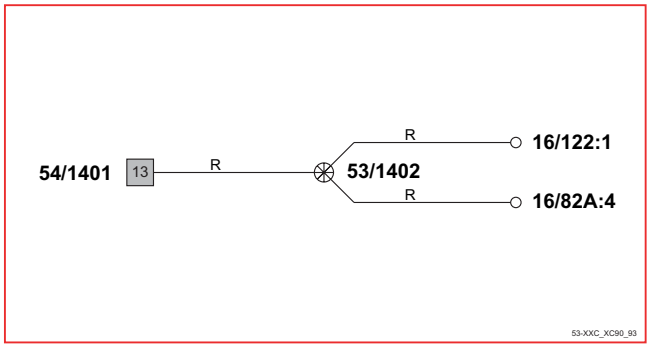
No.	RSE cabin harness			No.	RSE tunnel harness		
1	54/275:6	Connector	-	10	16/82E:24	DVD player/control module	-
2	54/275:2	Connector	R-W	9	16/82E:13	DVD player/control module	R-W
3	54/275:3	Connector	VO-GR	8	16/82E:14	DVD player/control module	VO-GR
4	54/275:4	Connector	GN	7	16/82E:15	DVD player/control module	GN
5	54/275:5	Connector	W	6	16/82E:16	DVD player/control module	W
6	54/274:5	Connector	W	5	16/82E:4	DVD player/control module	W
7	54/274:4	Connector	GN	4	16/82E:3	DVD player/control module	GN
8	54/274:3	Connector	VO-GR	3	16/82E:2	DVD player/control module	VO-GR
9	54/274:2	Connector	R-W	2	16/82E:1	DVD player/control module	R-W
10	54/274:6	Connector	-	1	16/82E:12	DVD player/control module	-
11	54/275:7	Connector	P	22	16/82E:23	DVD player/control module	P
12	54/275:8	Connector	GR	21	16/82E:22	DVD player/control module	GR
13	54/275:9	Connector	Y	20	16/82E:19	DVD player/control module	Y
14	54/275:10	Connector	GN	19	16/82E:20	DVD player/control module	GN
15	54/275:11	Connector	BN	18	16/82E:18	DVD player/control module	BN
16	54/275:12	Connector	W	17	16/82E:17	DVD player/control module	W
17	54/274:12	Connector	W	16	16/82E:5	DVD player/control module	W
18	54/274:11	Connector	BN	15	16/82E:6	DVD player/control module	BN
19	54/274:10	Connector	GN	14	16/82E:8	DVD player/control module	GN
20	54/274:9	Connector	Y	13	16/82E:7	DVD player/control module	Y
21	54/274:8	Connector	GR	12	16/82E:10	DVD player/control module	GR
22	54/274:7	Connector	P	11	16/82E:11	DVD player/control module	P

Branching points
53/448 - 53/1405

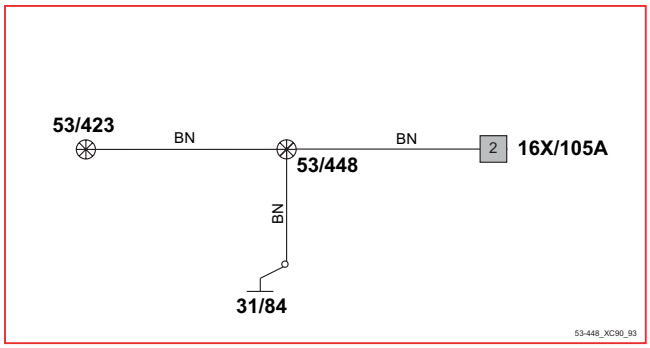
53/448 V70



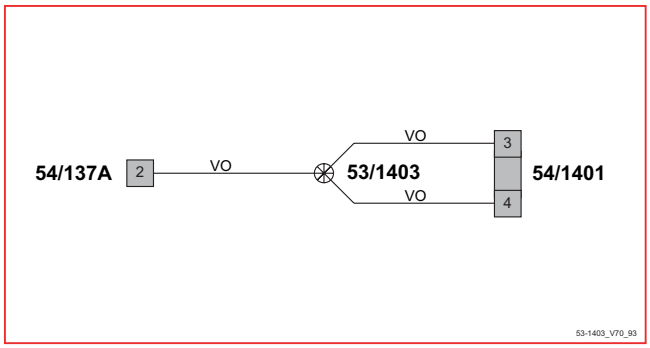
53/1402



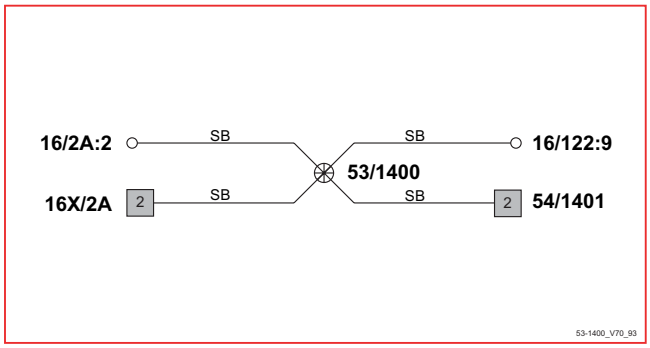
53/448 XC90



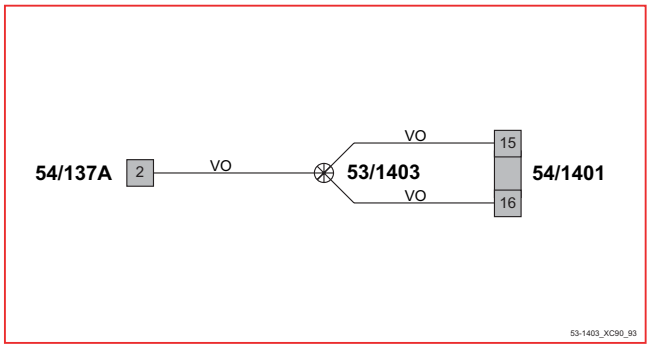
53/1403 V70



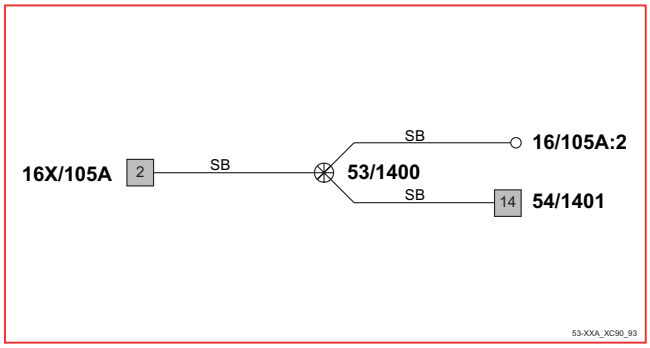
53/1400 V70



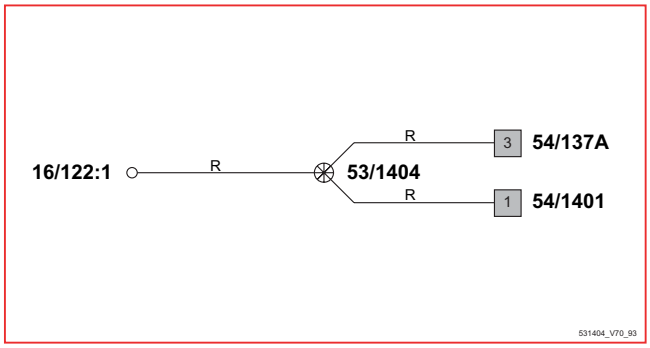
53/1403 XC90



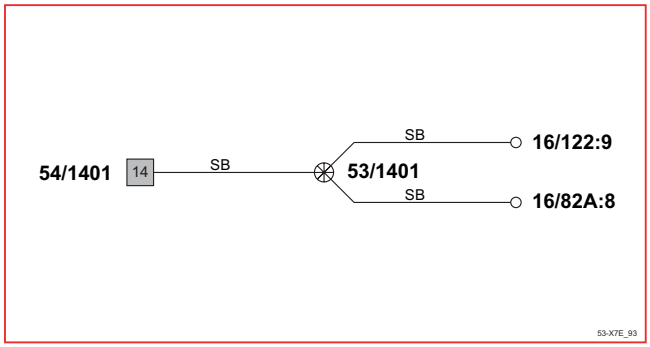
53/1400 XC90



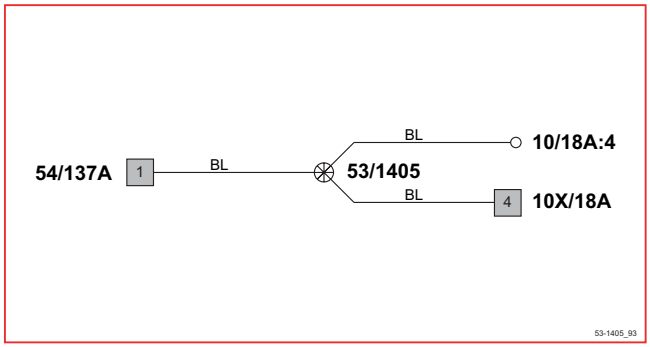
53/1404



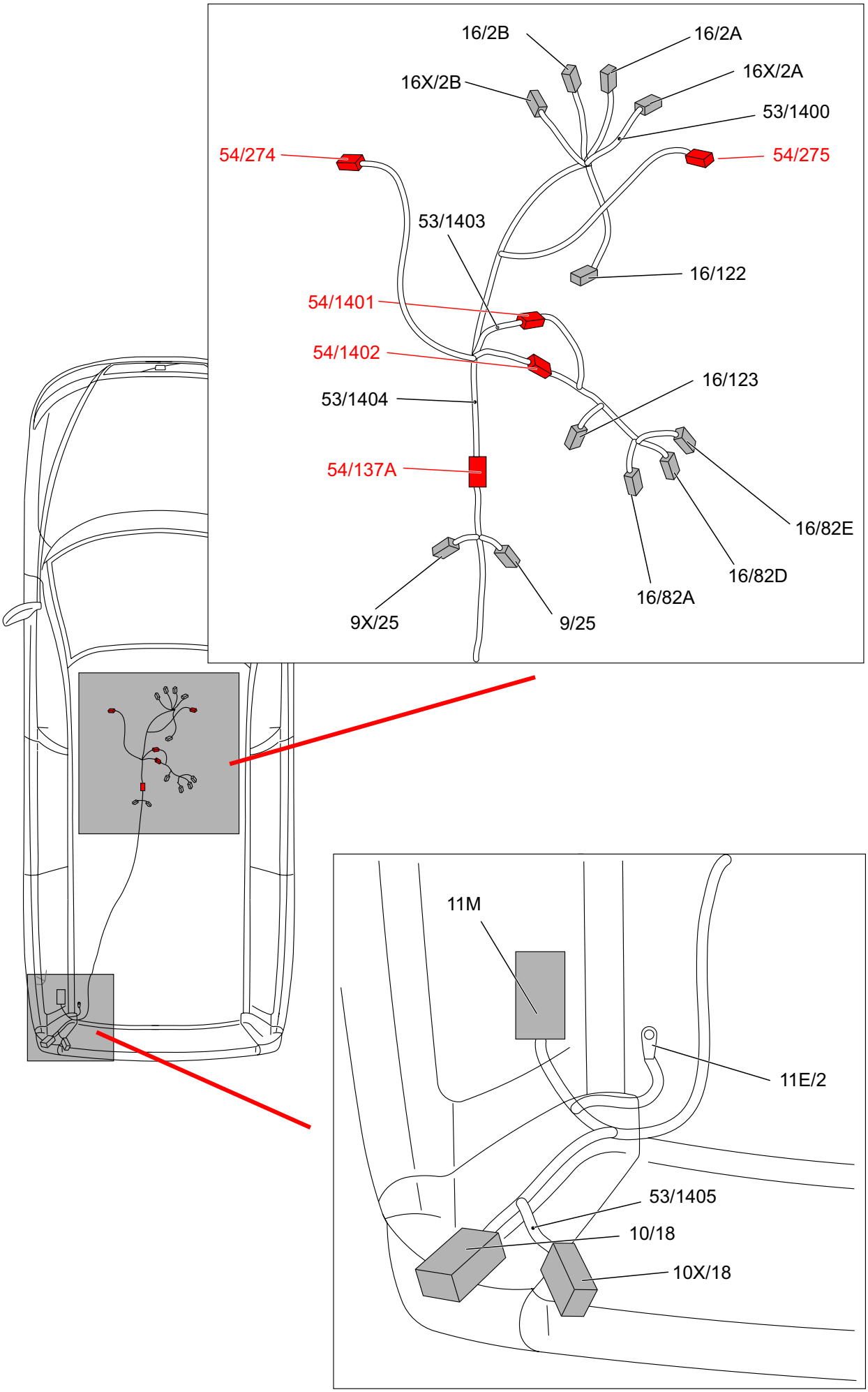
53/1401



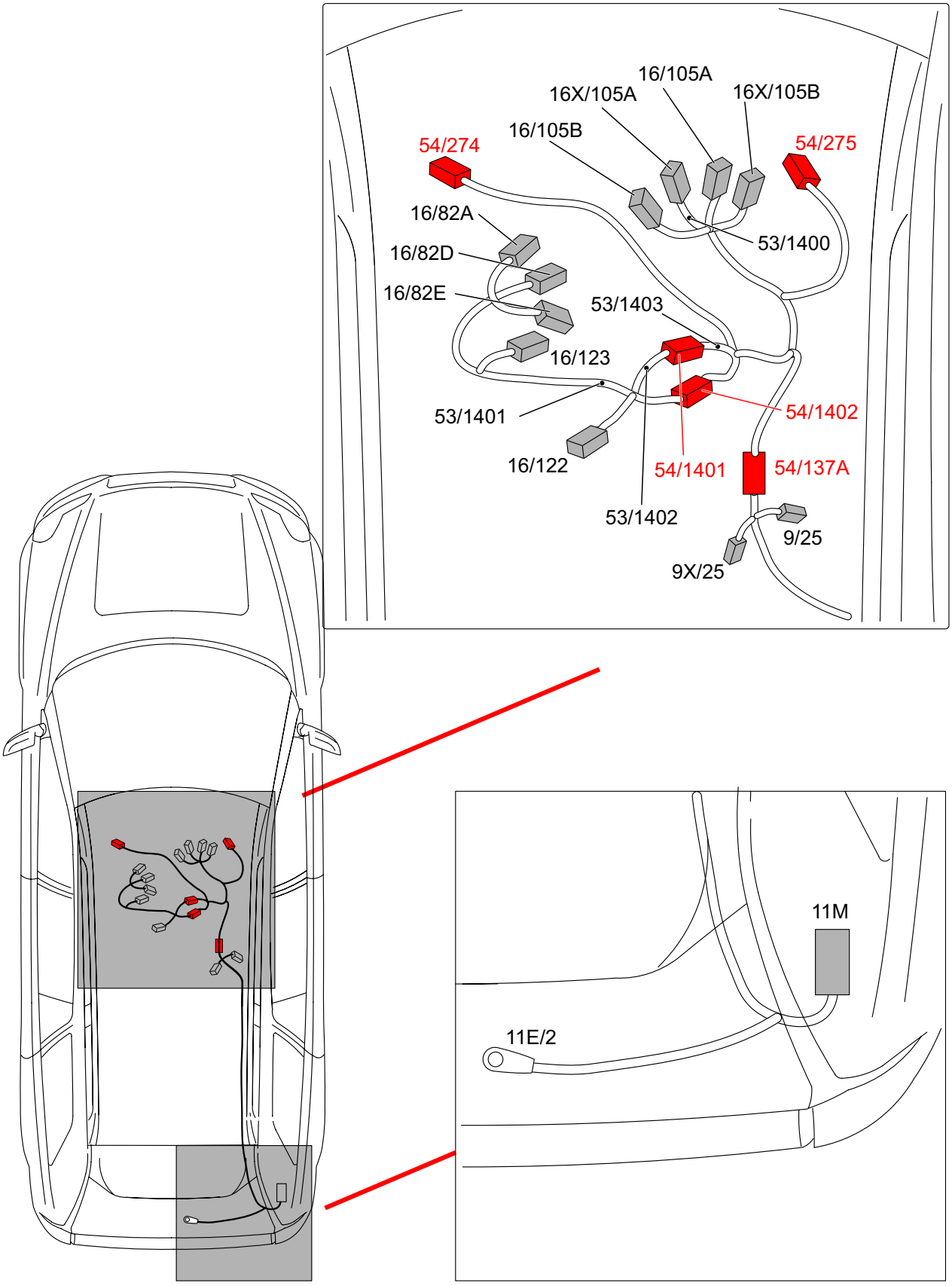
53/1405



Cable harness routine in vehicle
Rear Seat Entertainment harnesses V70

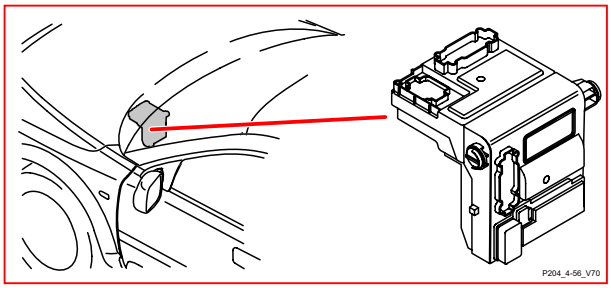


Cable harness routine in vehicle
Rear Seat Entertainment harnesses XC90

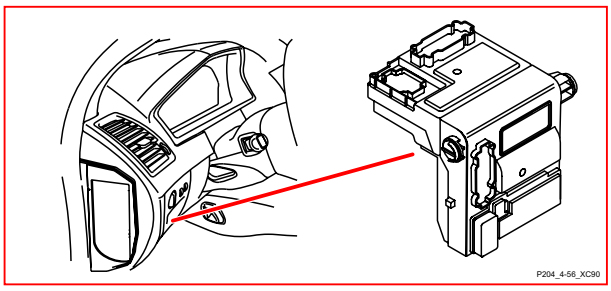


Component illustrations
4/56 - 16/81A

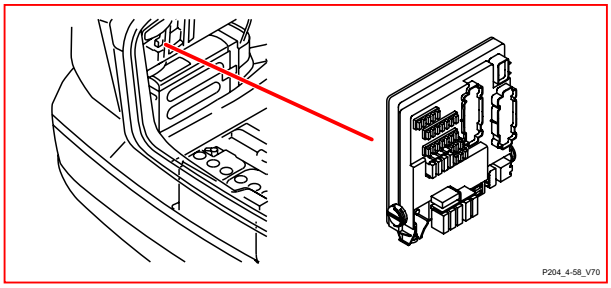
4/56 Central Electronic Module (CEM), V70



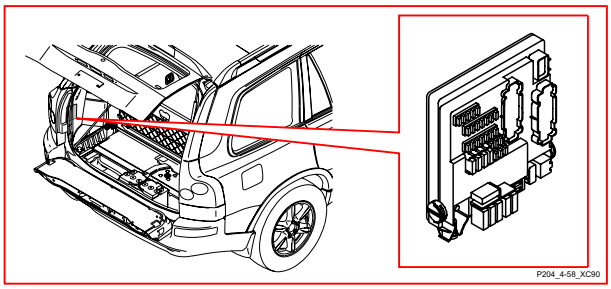
4/56 Central Electronic Module (CEM), XC90



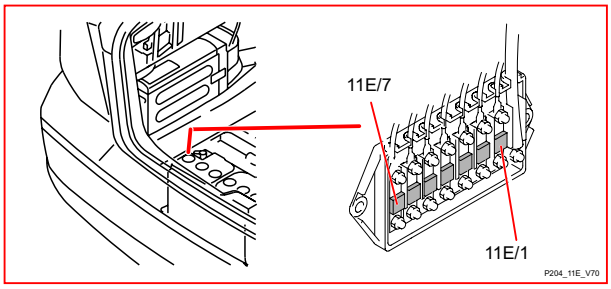
4/58 Rear Electronic Module (REM), V70



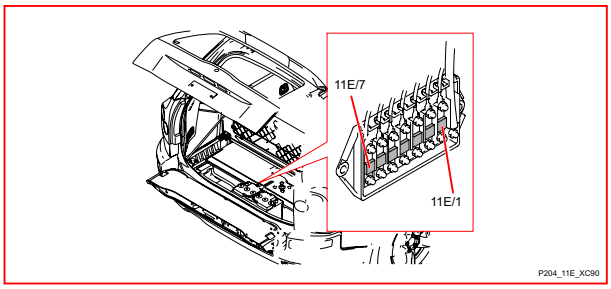
4/58 Rear Electronic Module (REM), XC90



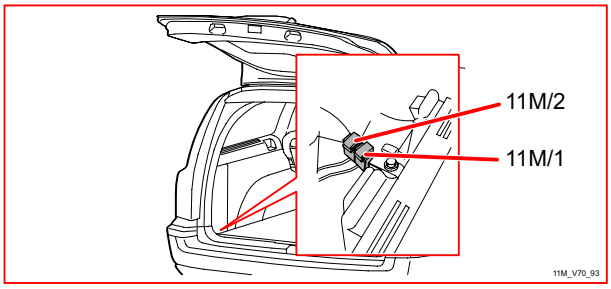
11E Main fuses at the battery V70



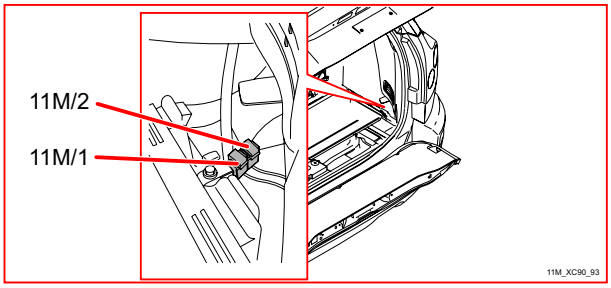
11E Main fuses at the battery XC90



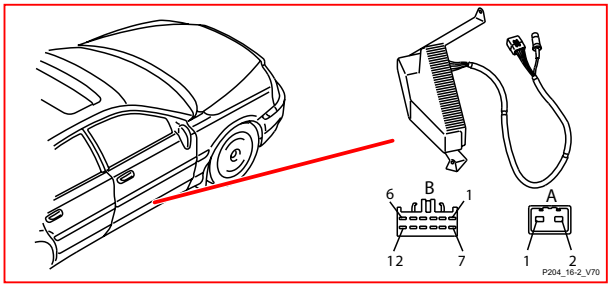
11M Fuses in spare fuse holder, cargo compartment V70



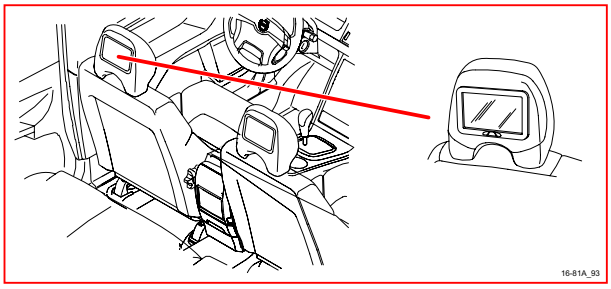
11M Fuses in spare fuse holder, cargo compartment XC90



16/2 Amplifier



16/81A Screen, LH head restraint



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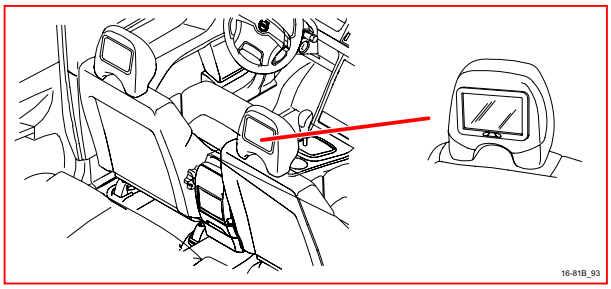
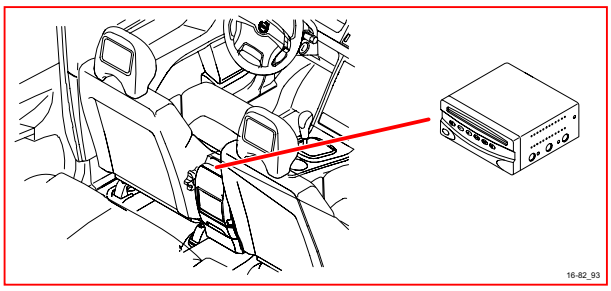
16/81B - 54/137A

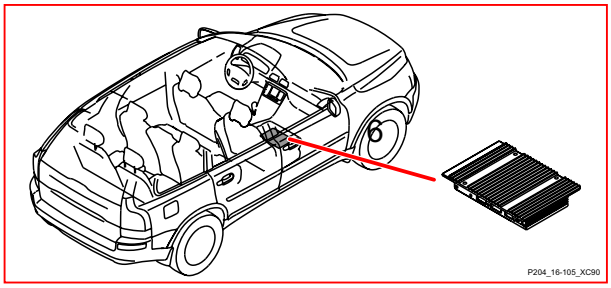
16/81B Screen, RH head restraint



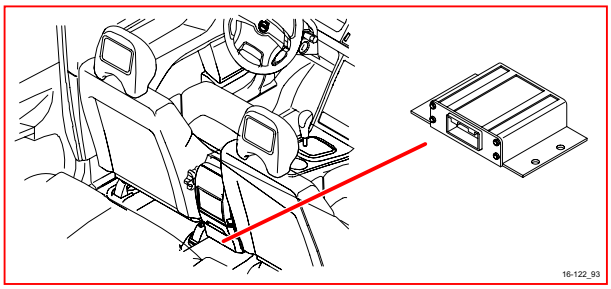
16/82 DVD player/control module



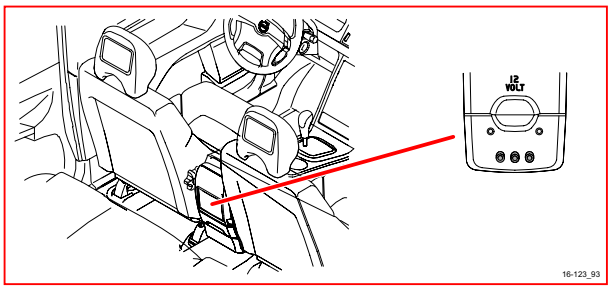
16/105 Audio Module (AUD)



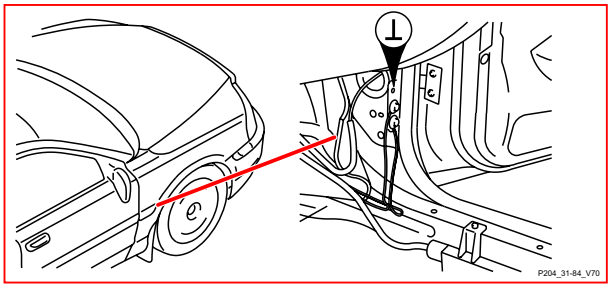
16/122 Rear Audio Separation module (RAS)



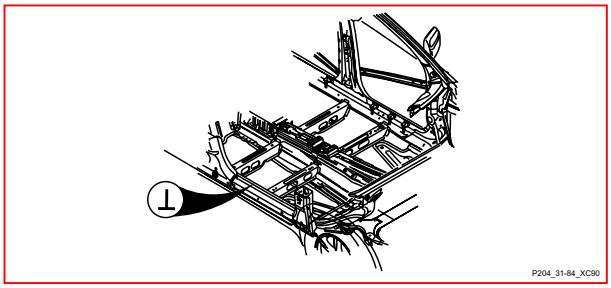
16/123 External equipment outlet (AUX)



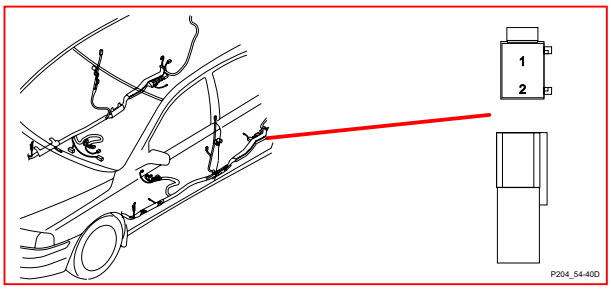
31/84 Ground connection, A-post, right side V70



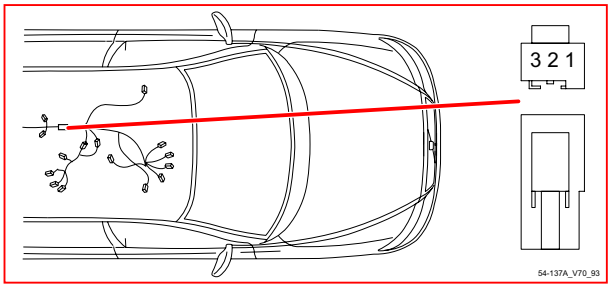
31/84 Ground connection, A-post, right side XC90



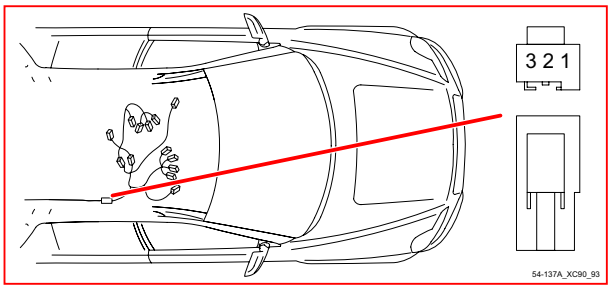
54/40D Connector



54/137AConnector V70



54/137AConnector XC90



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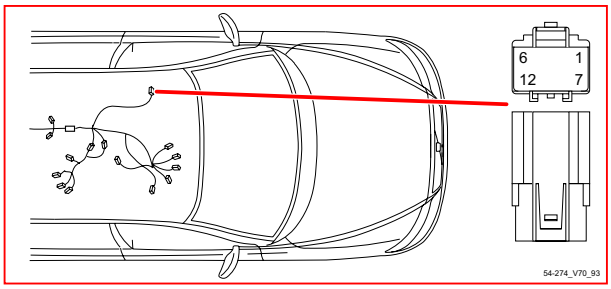
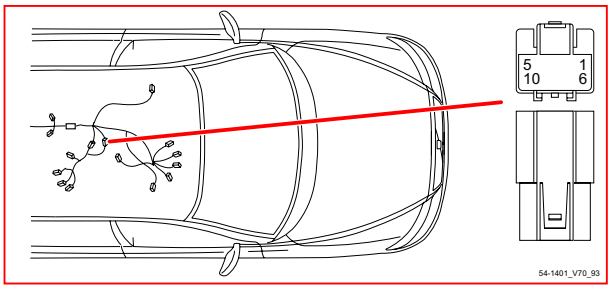
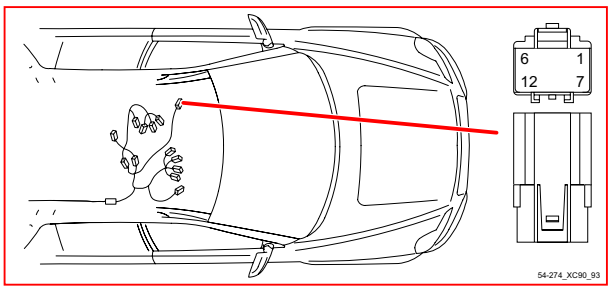
54/274 Connector V70



54/1401 Connector V70



54/274 Connector XC90



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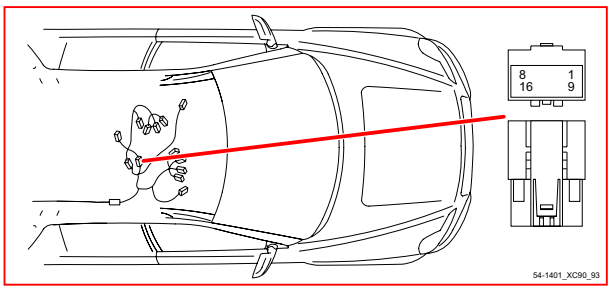
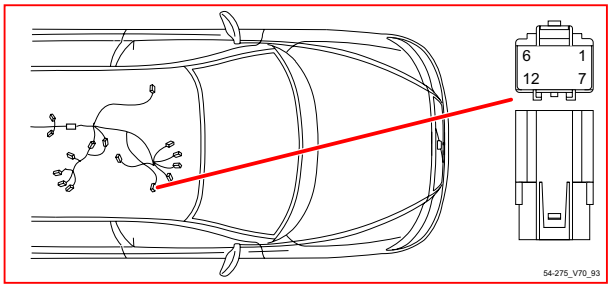


54/275 Connector V70



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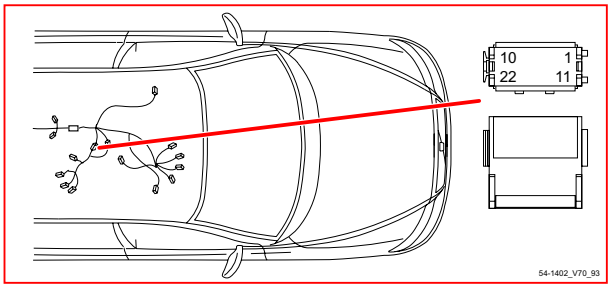

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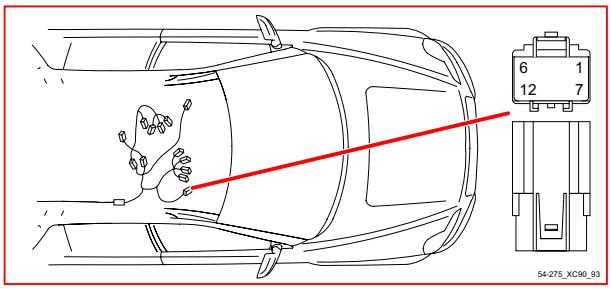

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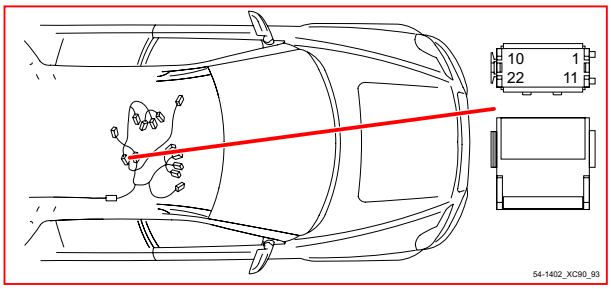

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